

Work Order ID 159928***159928***

Page 1

Wednesday, April 19, 2017 3:13:10 PM

Item ID: D2596 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Web, 205 Skidtube
Start Date: 4/24/2017 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 5/2/2017 Req'd Qty: 12.00 ***12*** Customer:
Reference: SCHEDULED/S

Approvals: Process Plan: DAS 21 Date: APR 20 2017 Tooling: _____ Date: _____ Run Start ***NR1***
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2596	Rev D

100 Skidtubes 0.00

100

Skidtubes

Skidtubes

Memo

- 1- Cut D2500-3-100 to length: 99.5"
- 2- Use Jig DT8093 to drill pilot holes #30
- 3- Open to 0.630" diameter as per Dwg D2596
- 4- Deburr

8.01

110

Chemical Conversion Coat per QSI005 4.1

0.00

110

HandFinish

Hand Finishing

Memo

3.70

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Quality Control

Memo

0.24

1 M667 6/04/25
TW

(X12) 2017/04/28
BETB

12 28 2017
DAS 38

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Work Order ID 159928

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Page 2

159928

Item ID: D2596

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Web, 205 Skidtube

Start Date: 4/24/2017 Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/2/2017 Req'd Qty: 12.00

12

Customer:

Reference: SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>LG 003</u>	0.00							
130									
Packaging	Memo	0.12				12	M667	17/04/20	
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.20							
Quality Control									

MAY 02 2017

DQA: _____ Date: _____



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QA Closed: _____ Date: _____

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

Picklist Print

Wednesday, April 19, 2017 3:13:10 PM

Page 1

Work Order ID: 159928

159928

Parent Item: D2596

D2596

Parent Item Name: Web, 205 Skidtube

Start Date: 4/24/2017

Required Date: 5/2/2017

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: D99.02.02Changed QA to QC, Added Step 6 and CostDM
IPP Rev:E 07-07-09 Incorporated DEO 9183 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-3-100		Manufactured	No			100	Each	83.0000	1	12			

D2500-3-100

Ext'n - I' Beam Web 4"

mbly 17/04/25

Location

Loc Qty

Loc Code

LG

83

147804

83

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Description Work Order Deviation				Disposition					
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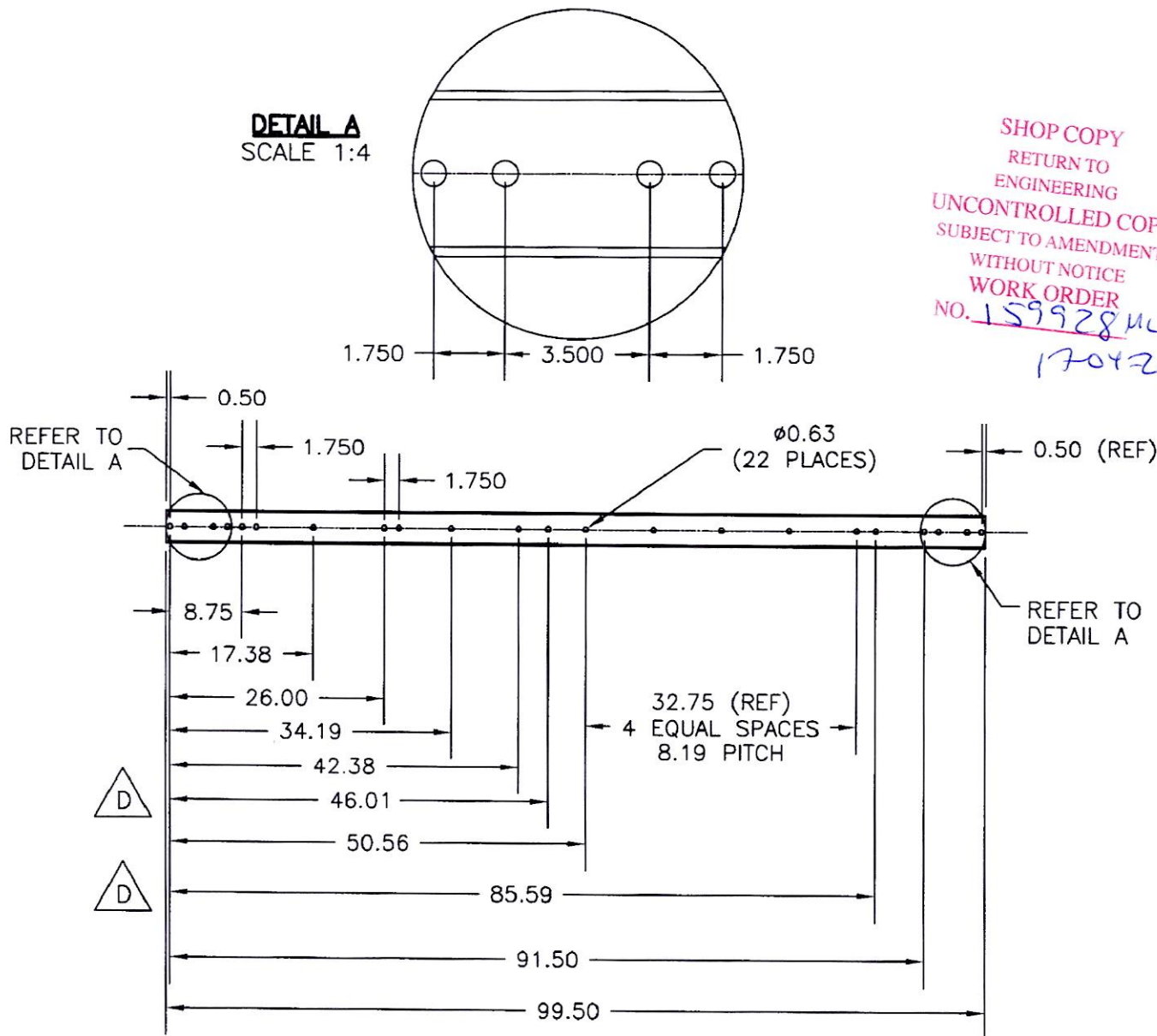
Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
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Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

DART

RELEASED
07.04.17

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 159928415
170420

DETAIL A
SCALE 1:4



DESIGN	DRAWN BY	DART AEROSPACE LTD	REV. D
04	04	HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 1
04	04	D2596	
DATE	TITLE	SCALE	
07.04.17	205 WEB	1:20	
A	96.09.16	NEW ISSUE	
B	97.07.23	Ø0.63 HOLE WAS Ø0.56	
C	98.09.14	INCORPORATED DEO 9097	
D	07.04.17	INCORPORATED DEO 9183	

D2596 WEB

- 1) MATERIAL: MAKE FROM D2500-3-100 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) DEBURR SHARP EDGES 0.010 TO 0.020

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